tima, Aubé. I think the two might well form a distinct genus on account of the *Scopeus*-like structure of the fect. Local; under seaweed, Mississippi Bay, Yokohama.

Lithocharis ochracea.

Pæderus ochraceus, Grav. Col. Micr. p. 59.

Mr. Lewis has obtained at Nagasaki and Yokohama a few individuals which I think belong to this species; unfortunately they are all females, and the determination is a little uncertain, *L. parviceps* being so extremely like this species that the two can only be certainly distinguished by the male characters.

Lithocharis dissimilis.

Lithocharis dissimilis, Sharp, Trans. Ent. Soc. Lond. 1874, p. 66.

This species has not been found again ; there is little doubt that it will form a new genus near *Scioporus*, but it would be scarcely possible to ascertain the characters sufficiently without too great a manipulation of the unique example.

[To be continued.]

XXVI.—Notes on the Genus Melapium, II. and A. Adams. By Edgar A. Smith.

THIS genus of Mollusca was founded by Messrs. H. and A. Adams * for the reception of the *Pyrula lineata* of Lamarck, a species which appeared to them, even on conchological grounds alone, generically distinct from *Pyrula*. An examination of the animal, which I have been able to make through the kindness of Mr. J. H. Ponsonby, confirms the correctness of their judgment. The animal may be described thus:—

Foot oval, rather high, not truncate or biemarginate in front, in length about one and a half times the width, pale beneath, bordered all round above the margin with two bright red lines about 2 millim. apart. Head small, compressed. Tentacles 5 or 6 millim. long, acutely tapering. Eyes minute, at outer base of tentacles, on slight prominences. Penis compressed, 10 to 12 millim. in length, obtuse at the end. Siphon shortish, moderately acuminate. Branchiæ in two plumes, the

* Genera Moll. vol. i. p. 136.

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right large, the left small. Operculum none. Odontophore (see fig.) most resembling that of Rapana bulbosa as figured by Troschel ('Gebiss der Schnecken,' vol. ii. pl. xiii. fig. 13), consisting of a single tricuspid

central tooth and a single acute curved lateral. The central tooth is transversely elongate and the cusps are nearly equal in size, short, acute, and approximated.

From the above description (taken from spirit-specimens) it will be seen that, with the exception of the odontophore and the absence of an operculum, there is a general resemblance to *Buccinum*.

The systematic position of *Melapium* has naturally been variously determined. H. and A. Adams placed it in the subfamily Rapaninæ of the Buccinidæ, between the genera *Separatista* and *Rapa*. Tryon located it in the same position, omitting the subfamily Rapaninæ, which he included in the Purpurinæ. Kobelt unites it with the genus *Rapana*, and Fischer * places it near *Tudicla* in the Turbinellidæ.

After due consideration I believe its correct position to be between *Rapana* and *Coralliophila*.

There are two species of this genus at present known. They have been confounded by most authors, with the exception of Sowerby.

The first species described was the *Pyrula lineata* of Lamarck. This I believe to be the smaller South-African species (=bulbus, Wood, also) and not the larger form figured by Kiener, Reeve, Chenu, Tryon, and Kobelt, which is undoubtedly the *Pyrula elata* of Schubert and Wagner.

Lamarck's description applies in every particular to the smaller form, but *not* to the larger. The size ("13 lignes") and the colour of the columella ("alba") certainly indicate the South-African species, and no mention is made of the prominent acute keel around the cauda of the body-whorl, a feature so marked that Lamarck could hardly have failed to notice it had it existed in the shell before him.

To a great extent Kiener must be held responsible for the confusion which has hitherto existed with regard to these two species.

In order to make Lamarck's diagnosis (which he quotes) agree with the shell he figured under the name of *P. lineata*, he made an alteration, the columella being described as "alboviolacea" instead of "alba." This was scarcely straight-

* Journ. de Conch. 1884, vol. xxxii. p. 10; Man. Conch. p. 620.



forward, as in most instances he quoted Lamarck's descriptions intact.

However, the shell figured by him certainly was not the type of the species, the size (2 inches) at once settling that point.

I have seen a number of the true *M. lineatum*, and none have exceeded the dimensions given by Lamarck.

Besides the differences mentioned by Sowerby *, I would point out that the brown lines in M. elata, besides being " broader and more distant," are not continued up to the suture nor so near to the basal extremity as in M. lineata, the latter also (as in Krauss's specimen) usually exhibiting some dark spots around the body-whorl a little above the middle.

The synonymy of the two species is as follows :—

Melapium lineatum (Lamarck).

- 1822. Pyrula lineata, Lamarck, Anim. s. Vert. vol. vii. p. 147; (Deshayes), ed. 2, vol. ix. p. 520 (1843). 1828. Buccinum bulbus, Wood, Index Test., Suppl. p. 12, pl. iv. fig. 8.
- 1848. Pyrula lineata, Krauss, Sudafr. Moll. p. 111.
- 1858. Melapium lineatum, H. & A. Ad. Genera Moll. vol. iii. pl. xiv. fig. 7.
- 1886. Melapium bulbus, Sowerby, Journ. Conch. vol. v. p. 6.

Hab. Cape of Good Hope (Krauss & Brit. Mus.); Port Elizabeth (Sowerby).

Melapium elatum (Schubert and Wagner).

- 1829. Pyrula elata, Schub. & Wagn. Conchyl. Cab. vol. xii. pp. 92 and 94, pl. cexxvi. figs. 4012-4013.
- 1840. Pyrula lineata, Kiener (non Lamarck), Spec. Coq. Viv. p. 24, pl. xv. fig. 1.
- 1847. Pyrula lineata, Reeve (non Lamk.), Conch. Icon. vol. iv. pl. viii. fig. 28.
- 1859. Melapium lineatum, Chenu, Man. Conch. p. 173, fig. 855.
- 1878. Rapana lineata, Kobelt, Illustr. Conchylienbuch, p. 52, pl. xv. fig. 2.
- 1880. Melapium lineatum, Tryon, Conch. Man. vol. ii. p. 213, pl. lxvii. fig. 395.
- 1883. Melapium lineatum, Tryon, Syst. Conch. vol. ii. p. 400, pl. xlv. fig. 50.

Hab. Indian Seas (Kiener).

The above probable locality must be accepted with reserve until it receives confirmation.

* Journ. of Conch. vol. v. p. 6. Ann. & Mag. N. Hist. Ser. 6. Vol. iii. 19

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